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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Maik Binas

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EXAMINER

DONADO, FRANK E

ART UNIT

PAPER NUMBER

2617

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,975	Applicant(s) BIENAS ET AL.	
	Examiner FRANK DONADO	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 February 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15 and 19-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15 and 19-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 2/22/10 has been entered. Claims 15, 19-22, 24, and 27 have been amended. Claims 1-14 and 16-18 have been cancelled. No claims have been added. Claims 15 and 19-28 are currently pending in this application, with claims 15 and 27 being independent.

Claim Objections

2. Claim 15 is objected to because of the following informalities: “**...after receipt of an acknowledgment signal...**” should be changed to “**...after receipt of said acknowledgment signal...**”, as there is antecedent basis for the acknowledgment signal. Appropriate correction is required.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 15, 19, 20, and 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mullen (**US PG Publication 2004/0203923**), in view of Johansson, et al (**US Patent No. 6,442,391**), and further in view of Kurihara (**US PG Publication 2005/0099942**). From now on, Johansson, et al, will be referred to as Johansson.

Regarding claim 15, Mullen teaches a method of determining a local position of a first mobile radio communication terminal device in a radio cell of a radio network of a radio communication system, wherein the radio cell is fixed by a base station, the method comprising: requesting that each second mobile radio communication terminal device participate in determination of the local position of the first mobile radio terminal device (**A requesting user of a cellular phone transmits a location request from said requesting cell phone to a second user, where said locationing includes finding the location of said requesting cell phone, Paragraph 43, lines 8-11 and**

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Paragraph 55, lines 7-13); transmitting position information by at least one radio signal from at least one second mobile radio communication terminal device, the location of which is known either to the at least one second mobile radio communication terminal device or to the radio network **(Said location is retrieved from said second cell phone and sent to said requesting cell phone, Paragraph 38, lines 5-8)**, and which is either in the radio cell or in another radio cell, the at least one radio signal being transmitted to the first mobile radio communication terminal device via either a direct radio connection or an indirect radio connection via the radio network **(Said location is sent to said requesting cell phone, Paragraph 38, lines 5-8)**; and inferring a distance between the first mobile radio communication terminal device and the at least one second mobile radio communication terminal device **(Said locationing includes finding position of said requesting cell phone relative to said second cell phone, Paragraph 55, lines 7-22)**. Mullen does not teach before emitting a retrieval signal, emitting a preceding inquiry signal from the first mobile radio communication terminal device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof for said participation; transmitting, from the first mobile radio communication terminal device, after receipt of the acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal; and locationing on the basis of the signal propagation time of the at least one radio signal. Johansson teaches before emitting a retrieval signal, emitting a preceding inquiry signal from the first mobile radio communication terminal

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device requesting that each second mobile radio communication terminal device send an acknowledgement signal indicating a readiness thereof for said participation (**A first user of a mobile locating node is first granted permission to locate a second user of a mobile node, before performing said locationing, through a signal transmitted from said second mobile node in response to a request for said locationing to be performed transmitted from said mobile locating node, Column 2, lines 22-27 and 66-67, Column 3, lines 1-6 and Column 6, lines 34-38**); and transmitting, from the first mobile radio communication terminal device, after receipt of said acknowledgement signal, a retrieval signal retrieving position information of the second mobile radio communication terminal device that sent the received acknowledgement signal (**Said mobile locating node transmits a signal to perform said locationing of said second mobile node after said reception of permission signal, Column 6, line 67 and Column 7, lines 1-8 and steps C3 through C6 in Figure 5**). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Mullen to include this feature for the benefit of security. Mullen and Johansson do not teach locationing on the basis of the signal propagation time of the at least one radio signal. Kurihara teaches locationing on the basis of the signal propagation time of the at least one radio signal (**A distance between a first and second wireless unit is obtained from a signal propagation time between said first and second wireless unit, Paragraph 29**). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Mullen, in view of Johansson, to include this feature for the benefit of

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transmission efficiency.

Regarding claim 19, Mullen, in view of Johansson, and further in view of Kurihara, teaches a method according to claim 15. Johansson further teaches the preceding inquiry signal is a broadcast radio signal **(Said communication between said mobile locating node and said second mobile node that includes request signal is performed via radio frequency signals, Column 4, lines 25-27).**

Regarding claim 20, Mullen, in view of Johansson, and further in view of Kurihara, teaches a method according to claim 15. Kurihara further teaches each second mobile radio communication terminal device sends the one radio information signal within a predetermined response period for each respective second mobile radio communication terminal device **(Said propagation signal used to determine position information is a ranging signal that must be delivered within a predetermined period from said second to said first wireless unit, Paragraph 29, lines 4-14).**

Regarding claim 22, Mullen, in view of Johansson, and further in view of Kurihara, teaches a method according to claim 15. Kurihara further teaches a time difference between a receipt of the retrieval signal and a sending of a radio information signal by each respective second mobile radio communication terminal device is included in each radio information signal as a position parameter of the position

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information **(Said propagation signal used to determine position information is a ranging signal that must be delivered within a predetermined period from said second to said first wireless unit, Paragraph 29, lines 4-14).**

Regarding claim 23, Mullen, in view of Johansson, and further in view of Kurihara, teaches a method according to claim 22. Mullen further teaches a current position of each respective second mobile radio communication terminal device and/or a sending time of the radio information signal from each respective second mobile radio communication terminal device is included in each radio information signal as a position parameter of the position information **(Said location is retrieved from said second cell phone and sent to said requesting cell phone, Paragraph 38, lines 5-8).**

Regarding claim 24, Mullen, in view of Johansson, and further in view of Kurihara, teaches a method according to claim 15. Mullen further teaches calculating the position of the first mobile radio communication terminal device via a Round Trip Time (RTT), an Observed Time Difference of Arrival (OTDOA), and/or a Global Positioning System (GPS) position device in the first mobile radio communication terminal device using the position information included in each radio information signal **(Said requesting cell phone comprises a GPS receiver, Paragraph 36 and Paragraph 39, lines 1-4).**

Regarding claim 25, Mullen, in view of Johansson, and further in view of Kurihara, teaches a method according to claim 24. Mullen further teaches, in the calculating, position information received by the first mobile radio communication terminal device is used **(Said locationing includes finding position of said requesting cell phone relative to said second cell phone, where said position of requesting cell phone is obtained from said requesting cell phone, Paragraph 55, lines 7-22).**

Regarding claim 26, Mullen, in view of Johansson, and further in view of Kurihara teaches a method according to claim 15. Mullen further teaches transmitting the position information received by the first mobile radio communication terminal device to a position determining unit in the radio network which calculates a current local position of the first mobile radio communication terminal device **(Said locationing includes finding position of said requesting cell phone relative to said second cell phone, where said position of requesting cell phone is obtained from said requesting cell phone in order to generate said current position of said requesting cell phone, Paragraph 55, lines 7-22).**

Regarding claim 27, Mullen teaches a radio communication terminal device, comprising: an inquiry unit for requesting information in the position determination and .position information from at least one mobile radio communication terminal device

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located in a radio cell of a radio network of a radio communication system or in a different radio cell, **(A requesting user of a cellular phone transmits a location request from said requesting cell phone to a second user, where said locationing includes finding the location of said requesting cell phone, and Paragraph 43, lines 8-11 and Paragraph 55, lines 7-13)**, a position of the at least one mobile radio communication terminal device being known to either the at least one mobile radio communication terminal device or to the radio network **(Said location is retrieved from said second cell phone and sent to said requesting cell phone, Paragraph 38, lines 5-8)**; a receiving unit receiving at least one radio information signal respectively from the at least one mobile radio communication terminal device and evaluating the received at least one radio information **(After retrieving said location, said requesting cell phone may determine further communication is desired, Paragraph 45, lines 10-23)**; and wherein the at least one radio information signal is transmitted via either a direct radio connection or an indirect radio connection via the radio network signal **(Said location is sent to said requesting cell phone, Paragraph 38, lines 5-8)**. Mullen does not teach requesting readiness to participate in the position determination; each radio information signal including acknowledged information of the readiness to participate in the position determination or position information of the known position of the respective at least one mobile communication terminal device sending the radio information signal, wherein the radio cells are fixed by base stations; and a distance between the first radio communication terminal device and the at least one mobile radio communication terminal device is inferred on the basis of the signal

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propagation time of the at least one radio signal. Johansson teaches requesting readiness to participate in the position determination, where each radio information signal includes acknowledged information of the readiness to participate in the position determination or position information of the known position of the respective at least one mobile communication terminal device sending the radio information signal **(A first user of a mobile locating node is first granted permission to locate a second user of a mobile node, before performing said locationing, through a signal transmitted from said second mobile node in response to a request for said locationing to be performed transmitted from said mobile locating node, Column 2, lines 22-27 and 66-67, Column 3, lines 1-6 and Column 6, lines 34-38)**, wherein the radio cells are fixed by base stations **(A plurality of base stations communicates within a plurality of cells, Column 4, lines 23-31)**. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Mullen to include this feature for the benefit of security. Mullen and Johansson do not teach a distance between the first radio communication terminal device and the at least one mobile radio communication terminal device is inferred on the basis of the signal propagation time of the at least one radio signal. Kurihara teaches a distance between the first radio communication terminal device and the at least one mobile radio communication terminal device is inferred on the basis of the signal propagation time of the at least one radio signal **(A distance between a first and second wireless unit is obtained from a signal propagation time between said first and second wireless unit, Paragraph 29)**. It would have been obvious to one of ordinary skill in the art at the time of the

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invention to modify the invention of Mullen, in view of Kurihara, to include this feature for the benefit of transmission efficiency.

Regarding claim 28, Mullen, in view of Johansson, and further in view of Kurihara, teaches the radio communication terminal device of claim 27. Johansson further teaches a radio communication system comprising the radio communication terminal device of claim 27 **(Said communication between said mobile locating node and said second mobile node is performed within a radio communication system via radio frequency signals, Column 4, lines 25-27).**

7. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mullen, in view of Johansson, and further in view of Kurihara, and further in view of Sheynblat **(US Patent No. 7,151,939).**

Regarding claim 21, Mullen, in view of Johansson, and further in view of Kurihara, teaches a method according to claim 15. Mullen, in view of Johansson, and further in view of Kurihara, does not teach a predetermined minimum accuracy of a position of each second mobile radio communication terminal device is a condition for each respective second mobile radio communication terminal device to send the acknowledgement signal. Sheynblat teaches a predetermined minimum accuracy of a position of each second mobile radio communication terminal device is a condition for

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each respective second mobile radio communication terminal device to send the acknowledgement signal **(Based upon a location request received from a mobile station (MS) comprising a location services (LCS) client, a determination is made as to whether or not a specified level of position accuracy may be provided, where said location is determined if said position accuracy level may be provided, Column 2, lines 13-16 and 49-67, Column 3, line 1, Column 4, lines 36-39, Column 10, lines 17-20 and 40-43, Steps 306 to 314 of Figure 3 and Figure 5).**

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Mullen, in view of Johansson, and further in view of Kurihara, to include this feature for the benefit of transmission efficiency and security.

Response to Arguments

8. Applicant's arguments, filed 2/22/10, with respect to the rejection(s) of claim(s) 15 and 19-28 under 35 USC 103 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Mullen, in view of Johansson, and further in view of Kurihara.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK DONADO whose telephone number is (571) 270-5361. The examiner can normally be reached Monday-Friday, 9:30 am-6 pm, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rafael Perez-Gutierrez can be reached on 571-272-7915. The fax phone

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number for the organization where this application or proceeding is assigned is 571-270-6361.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-273-8300.

/Frank Donado/
Art Unit 2617

/Rafael Pérez-Gutiérrez/

Supervisory Patent Examiner, Art Unit 2617